
PMSI and Meridian 1 messages

The types of messages that are sent from the PMS to the Meridian 1 and from the Meridian 1 to the PMS are described below.

Types of messages

The types of messages that are sent from the PMS to the Meridian 1 are

- Check In/Check Out commands
- Activating/Deactivating Telephone Restriction commands
- Activating/Deactivating Message Waiting lamp commands
- Activating/Deactivating Do Not Disturb feature commands
- Call Party Name Display commands
- Multi Language Wake Up commands

The types of messages that are sent from the Meridian 1 to the PMS are

- Cleaning-status changes as dialed by maids from hotel guest rooms
- Cleaning-status changes as entered on background terminals or special telephones (maid-inspector update)
- Cleaning-status changes that are caused by automatic update commands that could be programmed on the Meridian 1
- Call Number Information Messages
- Error messages that are caused by invalid PMS commands
- Polling messages (with X11 Release 19 and later)

PMS messages sent to the Meridian 1

Room Status messages

Table 1 contains a list of messages formatted and sent by the PMS to the Meridian 1. Each message is expected to have the appropriate protocol appended.

If the Directory Number Expansion Package (DNXP) is equipped, a Directory Number (DN)–related field in a Room Status command and response is expanded to accommodate up to 7 digits. X11 Release 17 adds VIP status and Maid ID to the SE command. Maid ID introduces the MI keyword and a 1- to 4-digit Maid Identification Number. The MI keyword, with the Maid ID, can be appended to a cleaning status command if the Maid ID package is equipped.

Table 1
Room status commands (Part 1 of 2)

SEt	STatus	DN	CHeck (IN)
SEt	STatus	DN	CHeck OUT
SEt	STatus	DN	OCcupied
SEt	STatus	DN	VAcant
SEt	STatus	DN	SAle
SEt	STatus	DN	NS (Not for Sale)
SEt	STatus	DN	REquest (cleaning)
SEt	STatus	DN	PRogress (cleaning in)
SEt	STatus	DN	CLeaned
SEt	STatus	DN	PAssed
SEt	STatus	DN	FAiled
SEt	STatus	DN	SKipped

Table 1
Room status commands (Part 2 of 2)

SEt	SStatus	DN	COntrolled (ON)
SEt	SStatus	DN	COntrolled OFF
SEt	SStatus	DN	COntrolled (ON)/OFF
SEt	SStatus	DN	E1 (ON)/OFF
SEt	SStatus	DN	E2 (ON)/OFF
SEt	SStatus	DN	REquest MI nnnn
SEt	SStatus	DN	Vlp(ON)/OFF
SEt	SStatus	DN	LA O
SEt	SStatus	DN	LA EN

Note: DN represents the Room Directory Number. Uppercase letters are the minimum input required to execute the command.

Message Waiting and Do Not Disturb status

The telephone-set Message Waiting lamp is normally controlled by the Message Center attendant. Do Not Disturb (DND) is controlled from an Attendant Console. With PMSI enabled, it is possible to turn these lamp conditions ON or OFF using the PMS computer.

At the physical link layer, the PMS computer functions as a TTY and is connected to the switch by means of a switch serial data interface (SDI) port. In the switch, each character received from the PMSI data link is treated as if it were entered from a TTY, and each character transmitted to the PMS computer is handled the same way as character output to a TTY.

The command processor interprets only the first two letters of each command word typed in. These letters are shown in uppercase, while the rest of the commands, including input parameters, are shown in lowercase. Parentheses indicate a keyword that is optional (or a variable that is a default).

The exact commands listed here are expected to have the appropriate protocol appended.

Message Waiting:

SEt STatus DN MW (ON)

SEt STatus DN MW OFF

Do Not Disturb:

SEt STatus DN DNd (ON)

SEt STatus DN DNd OFF

For PMSI, all new and existing commands are supported as of X11 Release 17. In addition, the new parameter (X11 Release 16 software), LLanguage, added to the OPtion, STatus, and CPnd commands, are also recognized by the PMSI.

Note: Only single Room Status commands should be sent from the PMS to the Meridian 1.

Automatic control

The PMS can request the system to automatically change the room status of all occupied rooms to “REquested” every day at a specific time by sending the following message where “hour1” is the time in 24-hour format:

SEt OPtion Time REquested hour1

To cancel the automatic status change, the following message is sent:

SEt OPtion Time REquest OFF

Off Hook Detection

The PMS can specify a time when the cleaning staff can use the room phone to signal that the room has been cleaned. The room phone handset is lifted and left off hook to signal “cleaning in PRogress.” When the handset is replaced, cleaning status is updated to “CLEaned.”

X11 Release 17 introduces Maid Identification. Off Hook Detection sends the default Maid ID number of zero (0) to the PMS if the Maid ID package is equipped. See *X11 features and services*.

The option is set using the following command, where “t1” is the start time for the Off Hook Detection plan, and “t2” is the end time for the Off Hook Detection plan:

SEt OPTION TIME DEtect t1 t2

Note: End time (t2) must be greater than the start time (t1). If the end time is not entered, t2 defaults to midnight, 2400.

Dial Access

The Dial Access option is an enhancement of the Off Hook Detection method for updating RMS data, and expands the list of RMS commands to seven. To set the PMS for Dial Access, use the following command:

SEt OPTION Time Dial (ON)

To disable Dial Access, use the next command:

SEt OPTION Time Dial OFF

Dial Access is supported only by room phones with Controlled Class of Service Allowed (CCSA) and is limited to changing the status of its own room. Also, Dial Access requires the use of SPRE numbers that precede special access codes for RMS functions. [Table 2](#) shows the necessary SPRE dialing commands.

Table 2
SPRE dialing commands

off hook	SPRE# 861	on hook (REquested)
off hook	SPRE# 862	on hook (in PProgress)
off hook	SPRE# 863	on hook (CLEaned)
off hook	SPRE# 864	on hook (PAssed)
off hook	SPRE# 865	on hook (FAiled)
off hook	SPRE# 866	on hook (SKipped)
off hook	SPRE# 867	on hook (No Sale)
off hook	SPRE# 86X*nnnn#	on hook (Status) Maid ID
Note 1: The X in 86X for Maid ID must be 1–7.		
Note 2: The characters 8, 9, 0, #, and * are reserved for special functions and are not allowed as input for SPRE code commands.		

Call Party Name Display name change

The PMS computer can change a Call Party Name Display (CPND) “name” associated with a given DN. To execute the change, use the following commands:

SEt CPnd dn "guest name" xpln LANGUAGE # room status

Legend

dn	=	station set DN
"guest name"	=	CPND name for the DN
xpln	=	Expected Name Length
#	=	language assignment for the room
room status	=	RMS coded indicator (checked in or out)

The CPND name must be enclosed in double quotes and *cannot* contain an asterisk (*), colon (:), or carriage return (<CR>). You must define the CPND data block in LD 95 before implementing the SEt CPnd command.

The first SEt CPND command defines the CPND name and the expected length. If the XPLN field is not specified, then it defaults to the actual size of the name string or the default length (DFLN) defined in LD 95, whichever is larger.

Refer to *X1 features and services* to configure and enable CPND.

Call Number Information messages

With X11 Release 12 and later, if the terminating telephone has Call Number Information Allowed (CNIA) class of service (CLS), the system sends Call Initiation and Call Disconnection messages for calling and called DN's on a real-time basis to the Background Terminal (BGD) and PMSI ports.

Class of service for CNIA is limited to 60 sets and is assigned in LD 10 and LD 11. Refer to Northern Telecom Publications *X11 features and services* and *X11 Software input/output guide*.

Note: A set that is assigned Virtual ACD Agent (VMA) class of service *cannot* be assigned CNIA class of service.

Message formats sent to the BGD port and PMSI ports are shown below, where "XXXX" is the calling DN, and "YYYY" is the called DN:

ST-CI XXXX YYYY

ST-CT XXXX YYYY

Note: The calling or called DN can have up to 7 digits if equipped with the DNX-P package.

When equipped with the DNX-P package, the Originating DN and Terminating DN fields in Call Initiated and Call Terminated messages are expanded from 6 bytes to 7 bytes.

Call Initiated (CI) A Call Initiated message is sent when the terminating set has Call Number Information Allowed (CNIA) class of service (CLS) and one of the following conditions occurs:

- The telephone set goes off hook and a number is dialed.
- The call is reestablished from On-Hold status.
- The telephone set is the third party in a Call Transfer.
- The set terminates a Forwarded Call.
- The call is picked up by a station.
- The Call Waiting key on a CNIA set is pressed.
- The call is extended by an attendant.

Call Terminated (CT) A Call Terminated message is sent when the terminating set has Call Number Information Allowed (CNIA) class of service (CLS) and one of the following conditions occurs:

- Call termination to a non-CNIA set
- Call Forward No Answer (CFNA)
- Call Park
- Call Transfer from originating or terminating sets
- Call Pickup received by the set
- Conference call
- Call On Hold

No messages are sent for the following call types:

- Dial Intercom calls
- overridden calls
- attendant calls
- CNIA-originated calls
- Automatic Wake Up calls
- trunk calls

Meridian 1 messages sent to the PMS

Table 3 provides a list of Meridian 1 messages sent to the PMS.

Table 3
Meridian 1 messages sent to PMS

Message formats	Type of message
ST <dn> RE	Cleaning status (cleaning requested)
ST <dn> PR	Cleaning status (cleaning in progress)
ST <dn> CL	Cleaning status (room cleaned)
ST <dn> PA	Cleaning status (passed inspection)
ST <dn> FA	Cleaning status (failed inspection)
ST <dn> SK	Cleaning status (cleaning skipped)
ST <dn> NS	Cleaning status (note for sale)
ST-CI <dn1> <dn2>	Call initiation
ST-CT <dn1> <dn2>	Call termination
ST PO (X11 r19 and later)	Polling message